

This listing of claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

Claim 1 (previously cancelled).

2. (previously amended) A choline monooxygenase gene encoding a protein comprising the amino acid sequence shown in SEQ ID NO:2, 4 or 6.

3. (Currently Amended) A gene comprising the following DNA (c) or (d):

(c) a DNA comprising the nucleotide sequence shown in SEQ ID NO: 1, 3 or 5;

(d) a DNA which hybridizes to the complement of a DNA comprising the nucleotide sequence shown in SEQ ID NO: 1, 3 or 5 under stringent conditions, which comprises hybridizing in the presence of 150 to 900 mM sodium at a temperature of 60 to 68°C, which wherein the DNA has 90% homology with the nucleotide sequence shown in SEQ ID NO:1, 3 or 5, and ~~which~~ wherein the DNA encodes a protein having choline monooxygenase activity.

4. (previously amended) A recombinant vector comprising the gene according to claim 2.

5. (original) A transformant comprising the recombinant vector according to claim 4.

6. (original) A method for producing a choline monooxygenase, comprising culturing the transformant according to claim 5 and recovering the choline monooxygenase from the resultant culture.

Claim 7 (previously cancelled).

8. (previously amended) A gene encoding a peptide comprising the amino acid sequence shown in SEQ ID NO:17.

9. (Currently Amended) A gene comprising the following DNA (g) or (h):

(g) a DNA comprising the nucleotide sequence shown in SEQ ID NO: 16;

(h) a DNA which hybridizes to a ~~DNA comprising the nucleotide sequence shown in~~  
the complement of SEQ ID NO: 16 under stringent conditions, which comprises hybridizing  
in the presence of 150 to 900 mM sodium at a temperature of 60 to 68°C, which ~~wherein the~~  
DNA has 90% homology with the nucleotide sequence shown in SEQ ID NO:16 and ~~which~~  
wherein the DNA encodes a protein having signal peptide activity.

10. (original) A recombinant vector comprising the gene according to claim 8 or 9  
and a gene of interest.

11. (original) The recombinant vector according to claim 10, wherein the gene of  
interest leads to production of a polypeptide or production of a plant metabolite.

12. (original) The recombinant vector according to claim 10, wherein the polypeptide  
or the plant metabolite confers stress resistance.

13. (original) The recombinant vector according to claim 10, wherein the gene of  
interest is *Chenopodium album* choline monooxygenase gene.

14. (Currently Amended) A transformant comprising the recombinant vector  
according to ~~anyone of claims 10 to 13~~ claim 10.

15. (original) The transformant according to claim 14, which is a plant body, plant  
organ, plant tissue or cultured plant cell.

16. (original) An environmental stress-resistant plant which is obtained by culturing  
or cultivating a transformed plant comprising the recombinant vector according to claim 12  
or 13 under environmental stress conditions.

17. (original) The plant according to claim 16, wherein the environmental stress is  
salt stress.

Claims 18-22 (previously cancelled).

23. (previously added) A recombinant vector comprising the gene according to claim  
3.

24. (previously added) A transformant comprising the recombinant vector according to claim 24.

25. (previously added) A method for producing a choline monooxygenase, comprising culturing the transformant according to claim 24 and recovering the choline monooxygenase from the resultant culture.

26. (previously added) A recombinant vector comprising the gene according to claim 9 and a gene of interest.

27. (previously added) The recombinant vector according to claim 26, wherein the gene of interest leads to production of a polypeptide or production of a plant metabolite.

28. (previously added) The recombinant vector according to claim 26, wherein the polypeptide or the plant metabolite confers stress resistance.

29. (previously added) The recombinant vector according to claim 26, wherein the gene of interest is *Chenopodium album* choline monooxygenase gene.

30. (previously added) A transformant comprising the recombinant vector according to claim 26.

31. (previously added) A transformant comprising the recombinant vector according to claim 27.

32. (previously added) A transformant comprising the recombinant vector according to claim 28.

33. (previously added) A transformant comprising the recombinant vector according to claim 29.

34. (previously added) The transformant according to claim 30, which is a plant body, plant organ, plant tissue or cultured plant cell.

35. (previously added) The transformant according to claim 31, which is a plant body, plant organ, plant tissue or cultured plant cell.

36. (previously added) The transformant according to claim 32, which is a plant body, plant organ, plant tissue or cultured plant cell.

37. (previously added) The transformant according to claim 33, which is a plant body, plant organ, plant tissue or cultured plant cell.

38. (previously added) The transformant according to claim 34, which is a plant body, plant organ, plant tissue or cultured plant cell.

39. (previously added) An environmental stress-resistant plant which is obtained by culturing or cultivating a transformed plant comprising the recombinant vector according to claim 13 under environmental stress conditions.

40. (previously added) The plant according to claim 39, wherein the environmental stress is salt stress.

41. (previously added) The gene according to claim 3, which is (c).

42. (previously added) The gene according to claim 3, which is (d).

43. (previously added) The gene according to claim 9, which is (g).

44. (previously added) The gene according to claim 9, which is (h).